

**Work Order ID 61231**

August 11, 2010 11:08:39 AM



Page 1

Item ID: D412-711-101

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Bubble Window

Start Date: 8/11/10 Start Qty: 1.00



Cust Item ID:

Required Date: 8/11/10 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: CL Date: 10/8/11 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D412-711-101	A								

100

0.00



DC

Document Control

Memo

Photocopy bluefiles and create labels  
for PPP D412-711-101 Change 002

0.00

S. 10/08/07H. for BG 10-8-27

110

0.00



HandThermo

Hand Finishing Thermoforming

HAND FINISHING THERMOFORMING

Memo

Set up Machine as per folio FTA 077 and D711W program

0.00

OK 10/08/25.

120

0.00



HandThermo

Hand Finishing Thermoforming

HAND FINISHING THERMOFORMING

Memo

Cut Blanks to 36" by 39"

0.00

BB X1 10/08/26.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

**Work Order ID 61231**

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Item ID: D412-711-101

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Bubble Window

Start Date: 8/11/10 Start Qty: 1.00



Cust Item ID:

Required Date: 8/11/10 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160  HandThermo	HAND FINISHING THERMOFORMING	0.00							
Hand Finishing Thermoforming	Memo 1) Trim off excess flange material 2) Buff out any light scratches or 3) Etch part number and batch number	0.00							<i>DF (X1) 10/08/26</i>
170  QC	QC2- Inspect parts off machine FAI/FAIB	0.00							
Quality Control	Memo 1) Visually inspect for clarity, and proper formation.	0.00							<i>DF (X1) 10/08/26</i>
180  QC	QC5- Inspect part completeness to step on W/O	0.00							
Quality Control	Memo 1) Visually inspect for clarity, and proper formation.	0.00							<i>S 10/08/27</i> <i>(40)</i>

Pho→

W/O: 61231		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
10/06/27	# 185	Perm. change Pick Kit					J 10/06/27	
10/06/27	# 185	Perm change Qty input kit to completeness - 810106/27 (x6)					J 10/06/27	

Part No: D412-711-101 PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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[illegible]

\_\_\_\_\_

\_\_\_\_\_

1. The first step in the process of developing a new product is to identify a market need.	1. The first step in the process of developing a new product is to identify a market need.
2. The second step is to conduct a feasibility study to determine if the product is viable.	2. The second step is to conduct a feasibility study to determine if the product is viable.
3. The third step is to develop a prototype of the product.	3. The third step is to develop a prototype of the product.
4. The fourth step is to conduct a pilot test to evaluate the product's performance.	4. The fourth step is to conduct a pilot test to evaluate the product's performance.
5. The fifth step is to launch the product into the market.	5. The fifth step is to launch the product into the market.
6. The sixth step is to monitor the product's performance and make adjustments as needed.	6. The sixth step is to monitor the product's performance and make adjustments as needed.
7. The seventh step is to evaluate the product's success and determine if it should be continued.	7. The seventh step is to evaluate the product's success and determine if it should be continued.
8. The eighth step is to discontinue the product if it is not successful.	8. The eighth step is to discontinue the product if it is not successful.
9. The ninth step is to analyze the reasons for the product's failure and learn from the experience.	9. The ninth step is to analyze the reasons for the product's failure and learn from the experience.
10. The tenth step is to use the lessons learned to improve the process for developing future products.	10. The tenth step is to use the lessons learned to improve the process for developing future products.

**Required Date: 8/11/10      Req'd Qty: 1.00**

[illegible][illegible]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

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Work Order ID: 61231



Parent Item: D412-711-101



Parent Item Name: Replacement Bubble Window

Start Date: 8/11/10

Required Date: 8/11/10

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A New Issue 06-02-01 JLM  
Manufacture in-house 10/06/28 DL

IPP Rev. B.

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MACRLICS.236		Purchased	No				sf	65.0000	16	16			

Plexiglass G .236"

Location

Loc Qty

Loc Code

therm

65

113571

17

115096

48

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
(X1) JB 9/08/26.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	61231
<b>Description:</b> Bubble Window.		<b>Part Number:</b>	D412-711-101
<b>Inspection Dwg:</b> 412-711-101 Rev: A		<b>Page 1 of 1</b>	

**FIRST ARTICLE INSPECTION CHECKLIST**  
**THERMOFORMING SECTION**

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than "	✓			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

<b>Measured by:</b>	OK	<b>Date:</b>	10/08/26
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**TRIMMING SECTION**

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.5"	Min	1.875"	✓			
32"	REF	32.75"	✓			
31"	REF	31"	✓			
0.090"	<del>0.090"</del>	0.090"	✓			
0.070"	Min. 0.070	0.097"	✓			
0.050"	Min	0.079"	✓			

<b>Measured by:</b>	OK	<b>Date:</b>	10/08/26
<b>Audited by:</b>	JB	<b>Date:</b>	10/08/27
<b>Preliminary Approval:</b>		<b>Date:</b>	

Rev	Date	Change	Revised by	Approved
B	10.04.14	Added preliminary approval	KJ	

10.04.14

